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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,957	11/24/2003	Jonah Harley	10030477-1	9406

7590 03/16/2007  
AGILENT TECHNOLOGIES, INC.  
Intellectual Property Administration  
Legal Department, DL429  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER
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LIANG, REGINA

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/723,957

Applicant(s)

HARLEY ET AL.

Examiner

Regina Liang

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4, 8, 16 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 8, 16, 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This Office Action is responsive to amendment filed 1/30/07. Claims 4, 8, 16 and 19 are pending in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Sherriff et al (GB 2 247 938 hereinafter Sherriff).

As to claim 8, Figs. 14-16 of Sherriff discloses a pointing device (puck), comprising: a surface having a puck field of motion defined thereon (62 in Fig. 14); a moveable puck comprising a user sensor ("click" switches 69) that detects an interaction between a user and the puck, the puck being confined to move within the puck field of motion (62); and a position detector (capacitor plates 67, 68) that measures the position of the puck in the puck field of motion, wherein the user sensor ("click" switches) detects a change in capacitance associated with an electrode on the puck (capacitor plates 72 and 76 for sensing switch information; see page 3, line 35 to page 4, line 4; and page 10, lines 16-31).

***Claim Rejections - 35 USC § 103***

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sherriff in view of Yoshikawa et al (US 5,815,139 hereinafter Yoshikawa).

As to claim 16, Sherriff discloses a pointing device (puck), comprising: a surface having a puck field of motion defined thereon (62 in Fig. 14); a moveable puck comprising a user sensor ("click" switches 69) that detects an interaction between a user and the puck, the puck being confined to move within the puck field of motion (62); and a position detector (capacitor plates 67, 68) that measures the position of the puck in the puck field of motion, wherein the position detector comprises surface electrodes (68) on the surface and a puck electrode (67) that moves with the puck.

Sherriff does not disclose the position detector measures current flowing between selected ones of the electrodes. However, Fig. 2 of Yoshikawa teaches a pointing device comprising a resistance position detector (tablet sheet 6) for measuring current flowing between selected ones of the electrodes (60a, 60b, 61a, 61b; see col. 6, lines 28-67). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the pointing device of Sherriff to have a position detector for measuring the current flowing between selected ones of the electrodes as taught by Yoshikawa because the capacitance position detector and the resistance position detector are alternative for each other and because this will enhance the degree of freedom for input operation of the relative manipulated variable input device and hence will improve its operability (col. 11, lines 9-11 of Yoshikawa).

5. Claims 4 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sherriff in view of Maatta et al (US 6,762,748 hereinafter Maatta).

As to claim 19, Sherriff discloses a pointing device (puck), comprising: a surface having a puck field of motion defined thereon (62 in Fig. 14); the moveable puck being confined to

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move within the puck field of motion (62); and a position detector (capacitor plates 67, 68) that measures the position of the puck in the puck field of motion, wherein the position detector comprises surface electrodes (68) on the surface and a puck electrode (67) that moves with the puck, wherein the position detector measures the capacitance between selected ones of the electrodes (page 5, lines 12-16 for example).

Figs. 7 and 8 of Sherriff disclose the device having a restoring mechanism (springs) that returns the puck to a predetermined area (central position) in the puck field of motion. Sherriff differs from the claim in that the restoring mechanism not having a first magnet and a second magnet. However, Maatta teaches a restoring mechanism in a pointing device comprises a first magnet (M1) (in Figs. 2, 4a) and a second magnet (M2) for returning the puck to the centered position (see Figs. 2, 4a, and col. 5, lines 24-53; Maatta states “the two attracting magnets exhibit a tendency to return to the state of maximum combined flux thus the magnets will tend to return to this centered position despite any applied external forces”). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the restoring mechanism of Sherriff to employ the magnets as taught by Maatta in order to provide a compact low profile pointing device (col. 1, lines 7-9 of Maatta).

As to claim 4, note the discussion of claim 19 above. In addition, Sherriff teaches a moveable puck comprising a user sensor (“click” switch 41 in Fig. 11 for example) that detects an interaction between a user and the puck, and the user sensor detects a change in capacitance associated with an electrode on the puck (Figs. 15, 16, the capacitor plates 72 and 76 for sensing switch information; see page 3, line 35 to page 4, line 4; and page 10, lines 16-31).

***Response to Arguments***

6. Applicant's arguments with respect to claims 4, 8, 16 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's argument regarding claim 8 are not persuasive. Page 10, lines 25-29 of Sherriff teaches to supply an electrical charge to the respective capacitor when a switch 69 is actuated, in other words, when the switch is not actuated, no electrical charge is applied to the capacitor. Therefore, the capacitance of the capacitor is changed during the operation and is detected to indicate operation of the switch.

Applicant's remarks regarding claims 4 and 19 are not persuasive since Sherriff teaches the position detector and the user sensor as claimed, see the rejections above.

Applicant's remarks regarding claim 16 are not persuasive. Yoshikawa states "when the X-coordinate resistance sheet 60 is pressed, a current it flows from the pressed position P on the X-coordinate resistance sheet 60 to the Y-coordinate resistance sheet 61 via a contact resistor  $R_p$ ", which teaches the position detector measures current flowing between the electrodes on the sheet 60 and 61. The section cited by applicant merely disclose the contact resistance detection mode which is not affected by the current flows, however this does not apply to the X and Y position detection mode.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

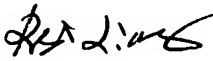
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Regina Liang  
Primary Examiner  
Art Unit 2674

3/14/07